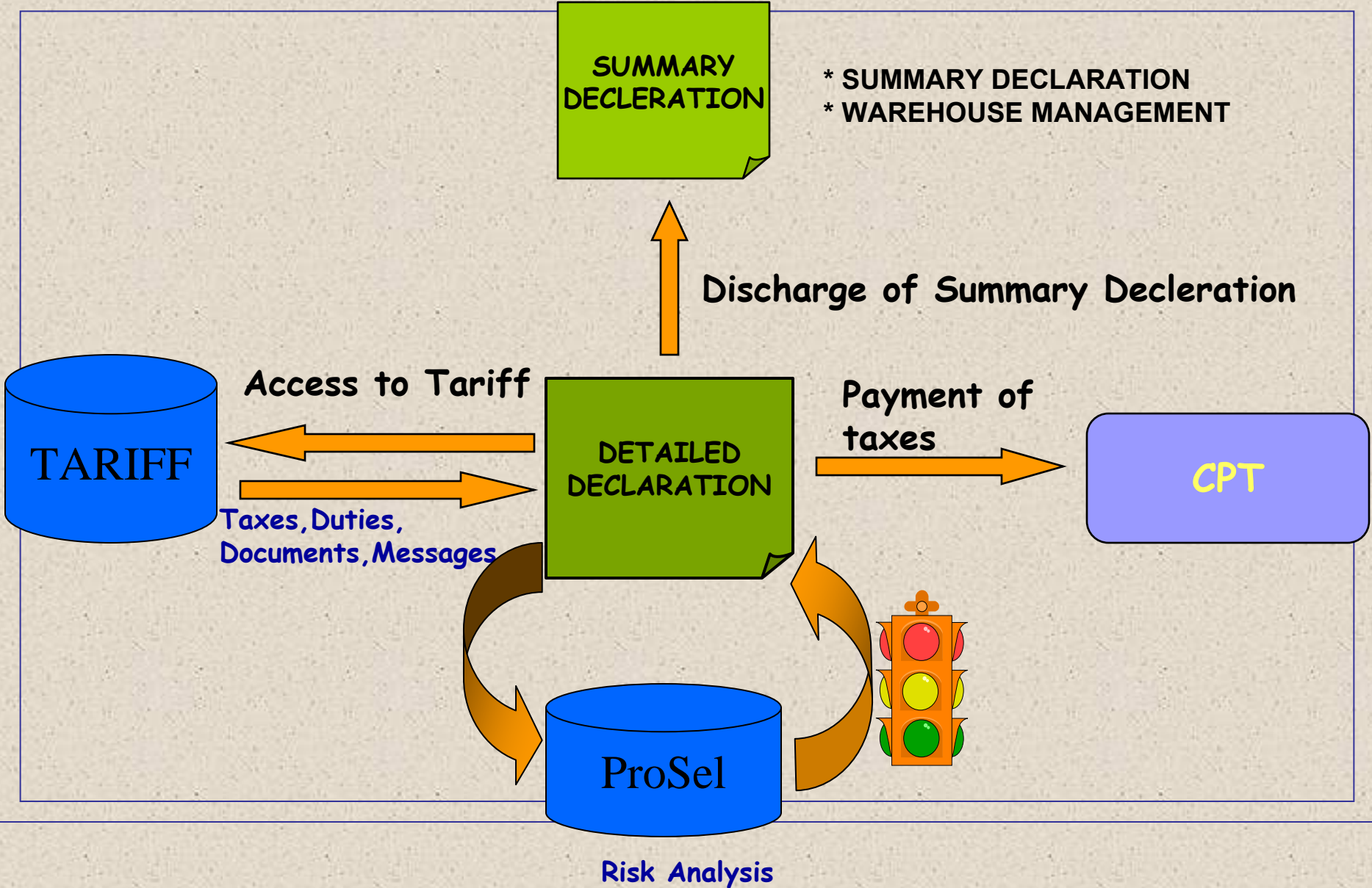




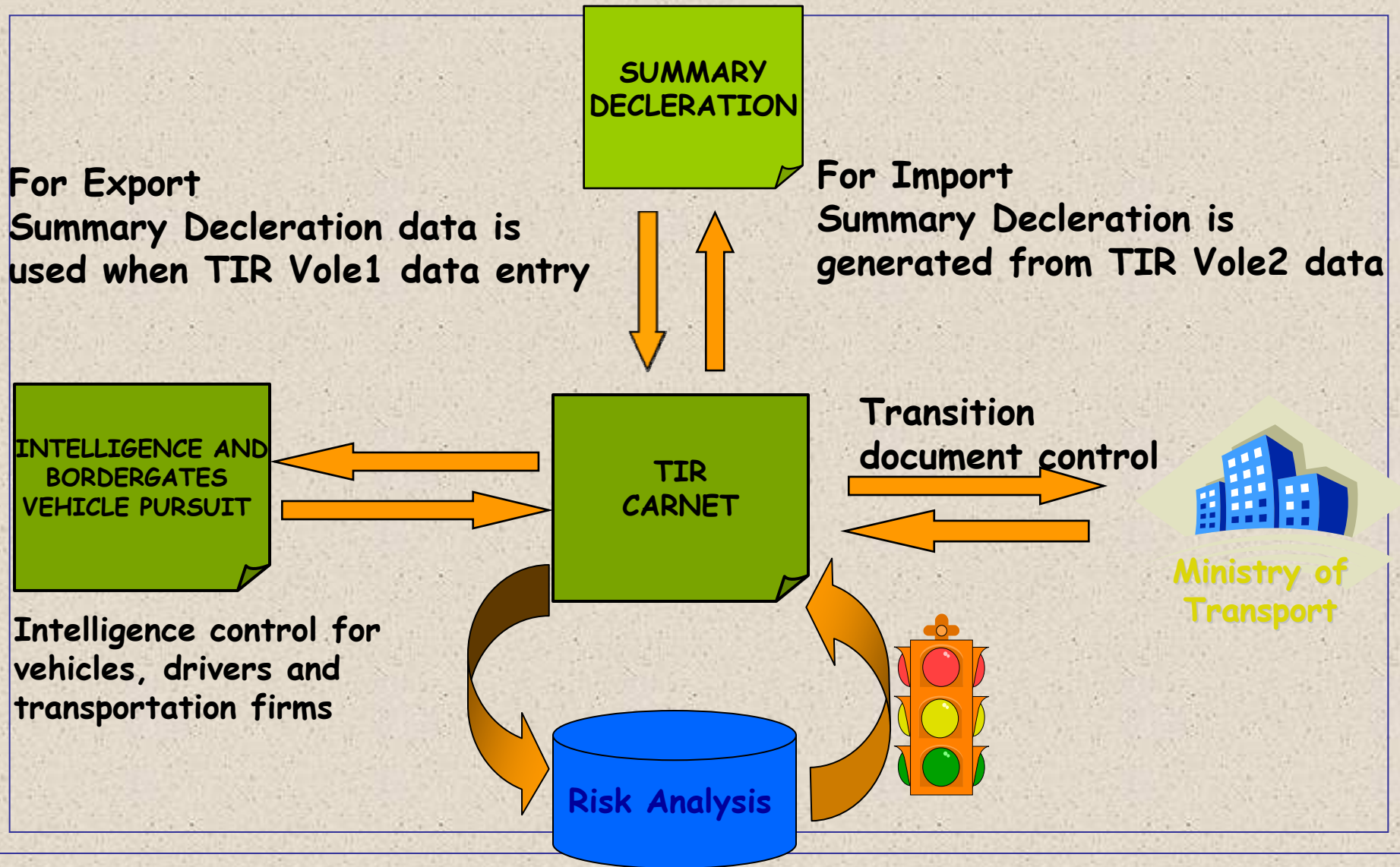
CENTRAL BİLGE AND TIR APPLICATIONS IN TURKEY

Hasan LALE
(hlale@gumruk.gov.tr)

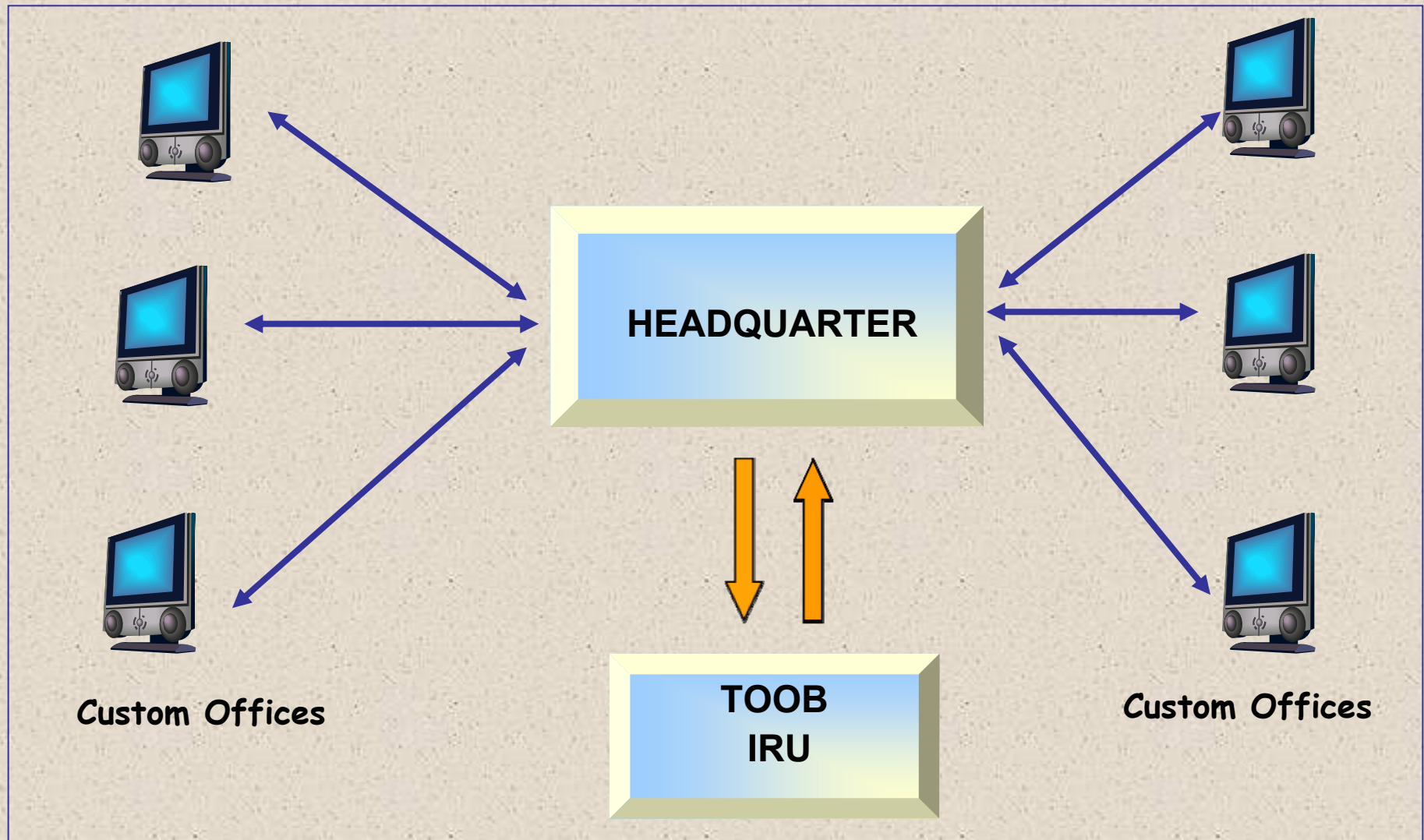
MODULES OF BILGE



TIR SYSTEM



TIR-Current Situation (Distributed Architectures)



Current Situation-Disadvantages:

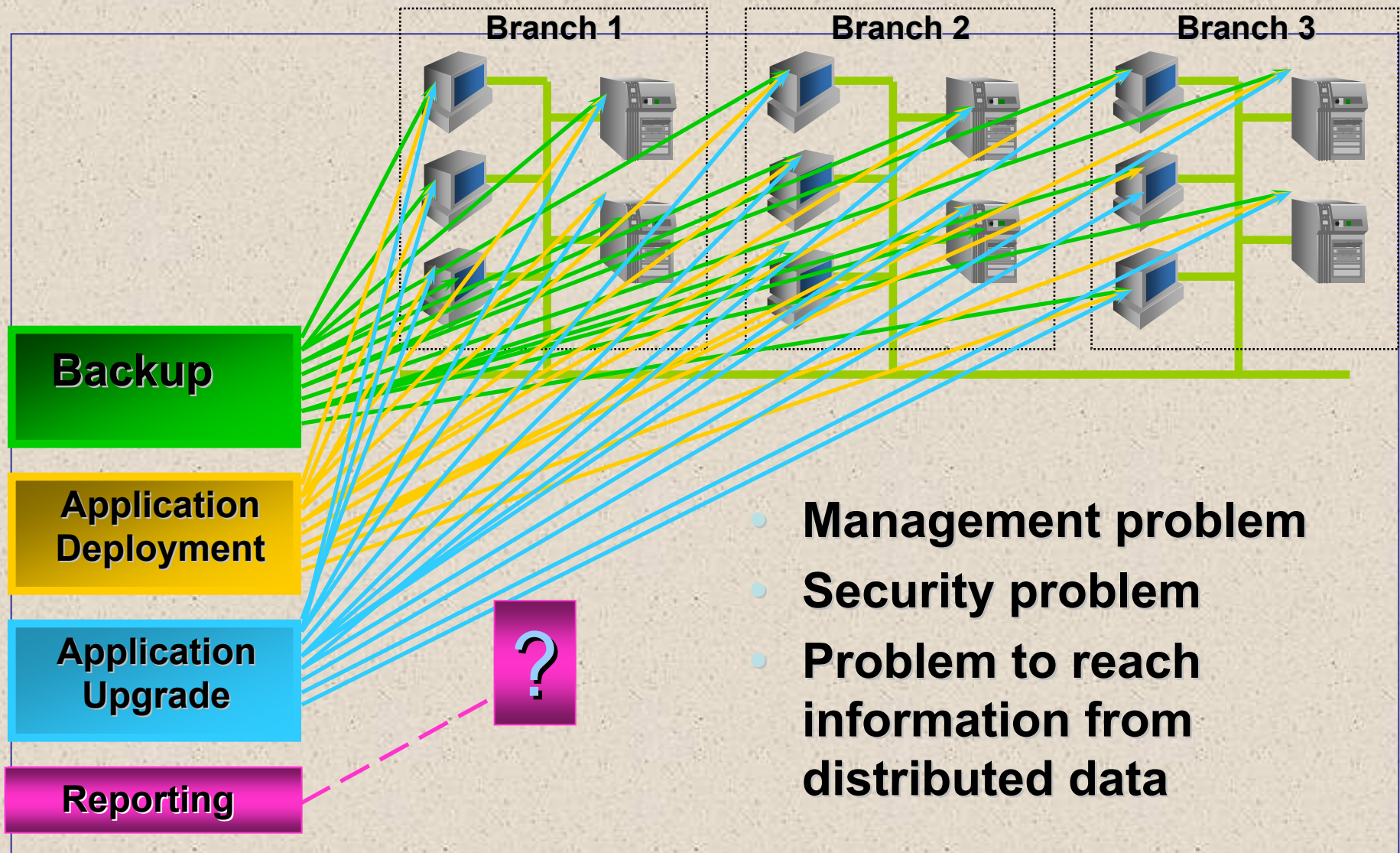
- Difficulty with collecting data at Headquarters because of distributed system
- Delay in transferring data to IRU
- Delay in releasing guarantee



CENTRALIZATION

Why Centralized Architecture ?

Distributed ...

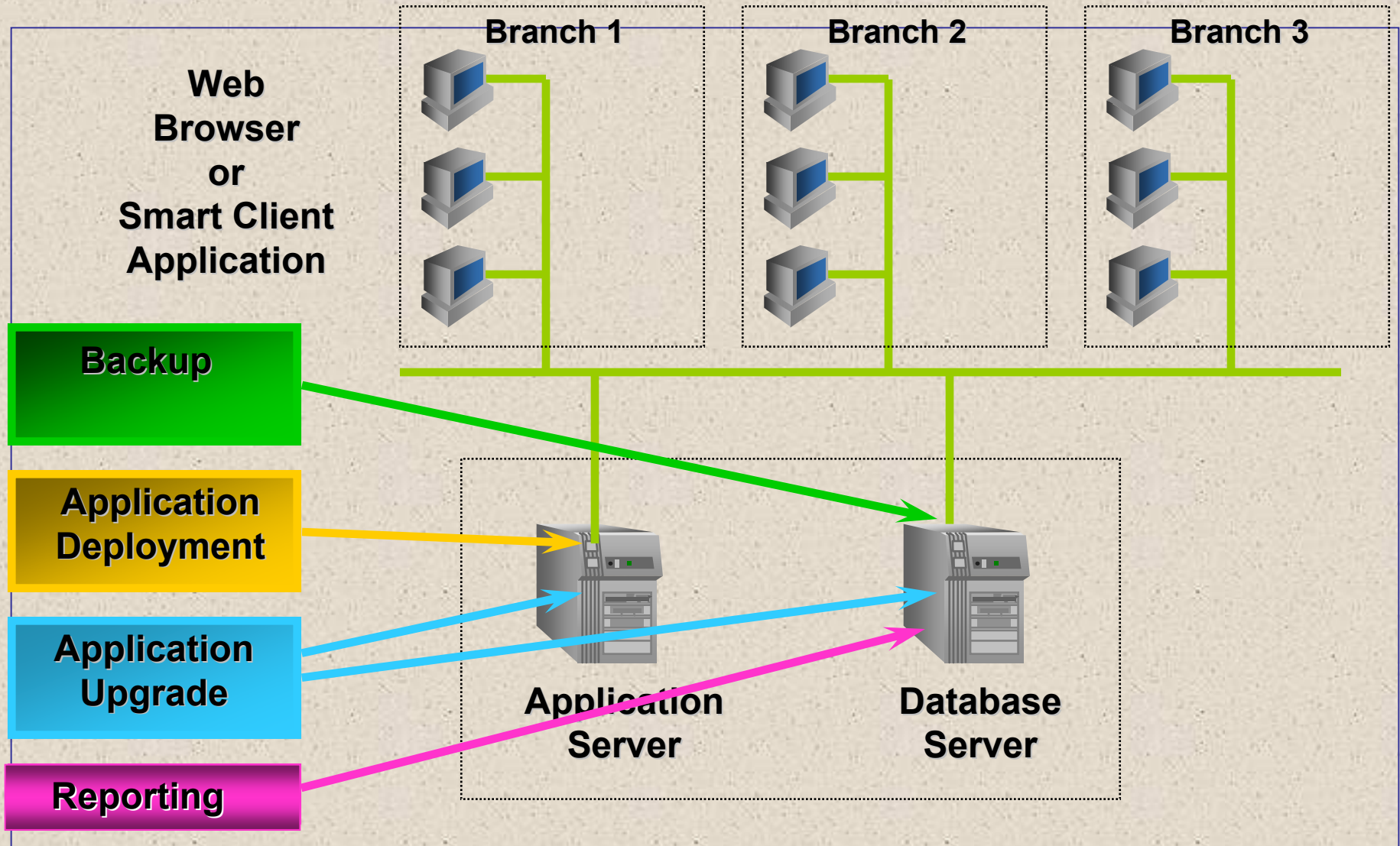


CENTRALIZATION

Main objectives behind the “centralisation” decision are to:

- Simplify the system management
- Lower the maintenance costs
- More efficient utilization of system and human resources
- Increase the quality of service with centralized control
- Improve the IT infrastructure
- Preparation for EU IT interconnectivity rules for integration with EU Institutions

...Centralized



Centralized Architecture

Seems to be advantageous;

- Centralized server is down, everybody is down
- Increase in number of users (internal and external)
- Increase in quantity of data results in difficulty in management and performance
- What about disaster ? What is the definition of the disaster ?

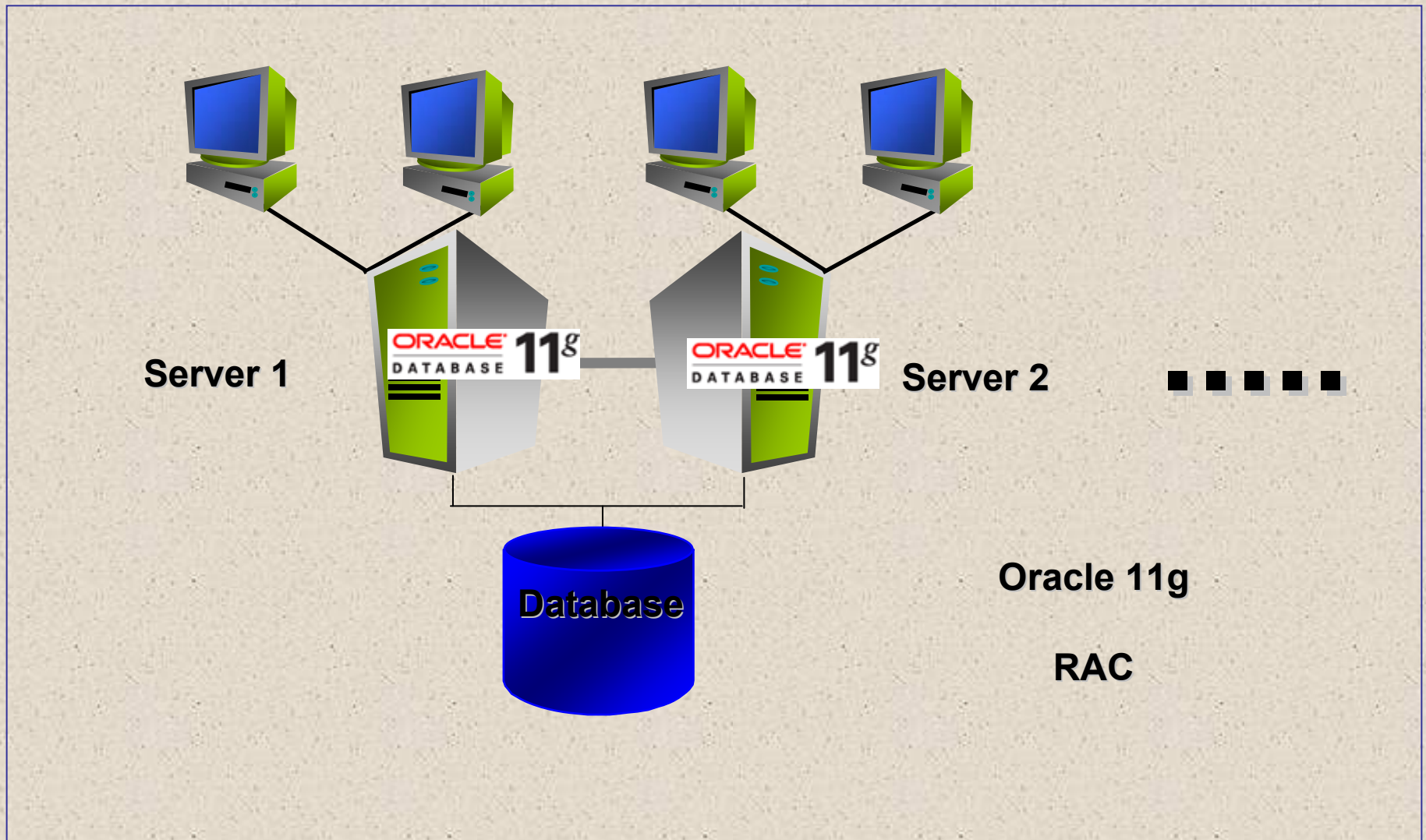
Database Management System Strategy

- Database Migration
- Database Clustering
- Partitioning
- Database Security
- Database Backup and Recovery
- Database Disaster Recovery

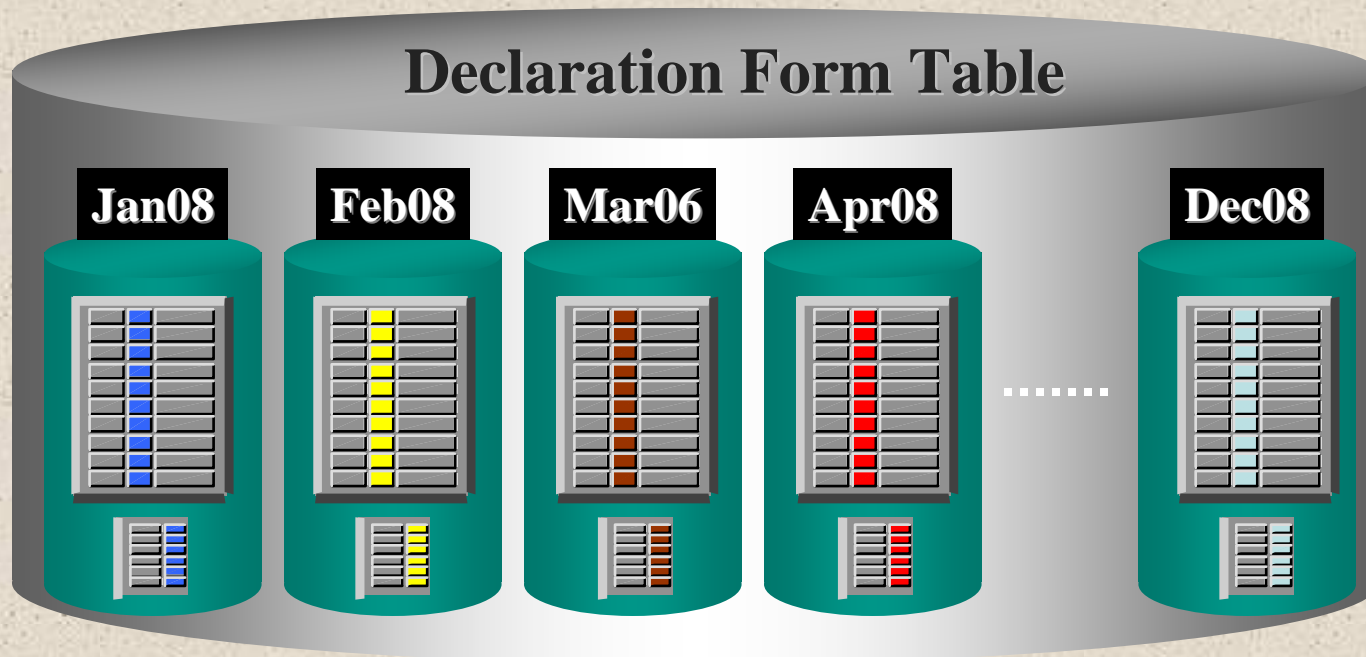
Database Centralization Strategy

- Data Consolidation
- Data Verification and Validation
- Database Design Changes
- Data Modeling

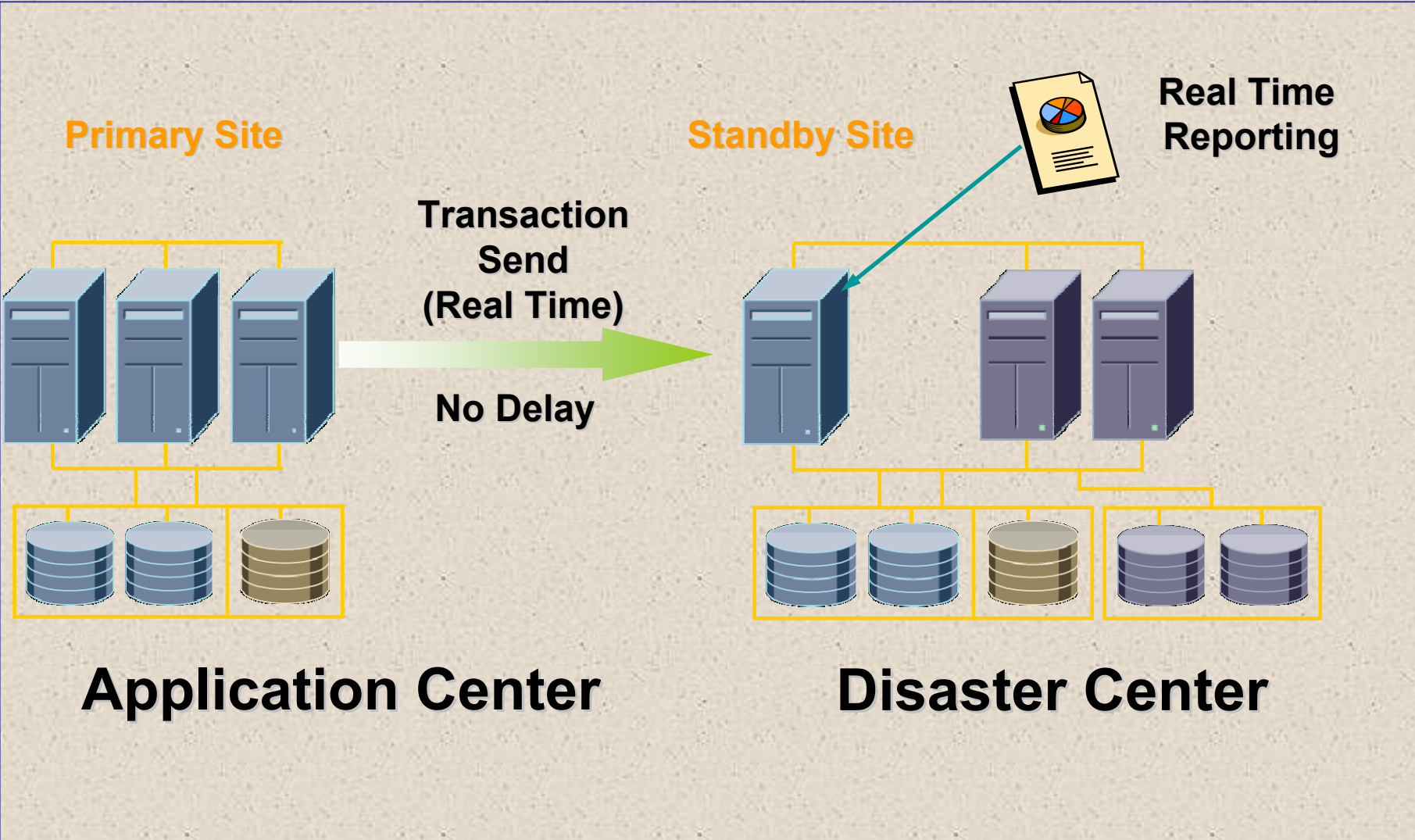
Scaleable



Oracle Partitioning



Disaster Recovery



CENTRALIZED BILGE

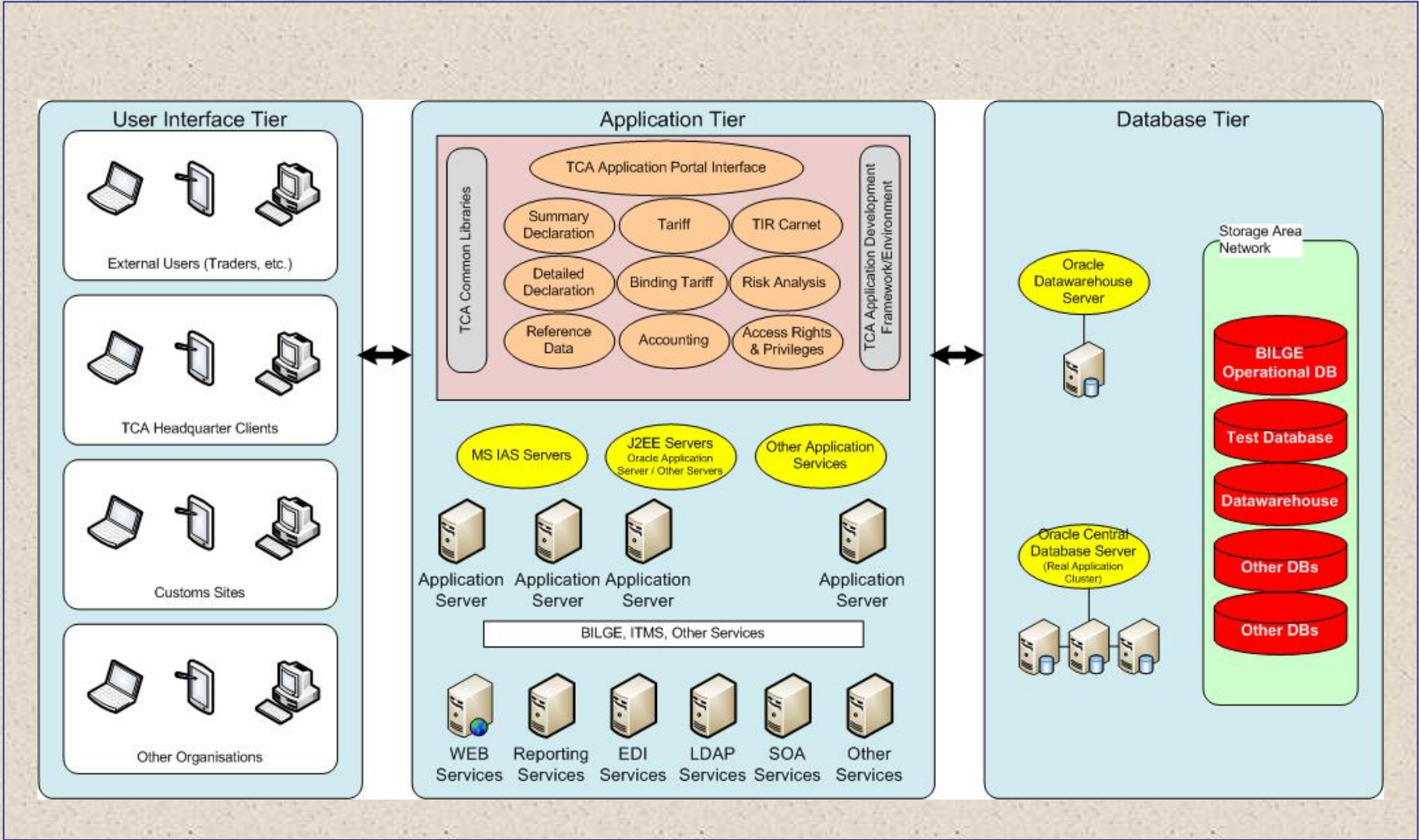
Defined Standards

- User Interface Standards
- Database Standards
- System Architecture Standards

Software Architecture Strategy

- SOA Approach
- Functional Architecture
- Layered Architecture

Functional Architecture



Layered Architecture

Presentation

Presentation Logic

Application (Business) Logic

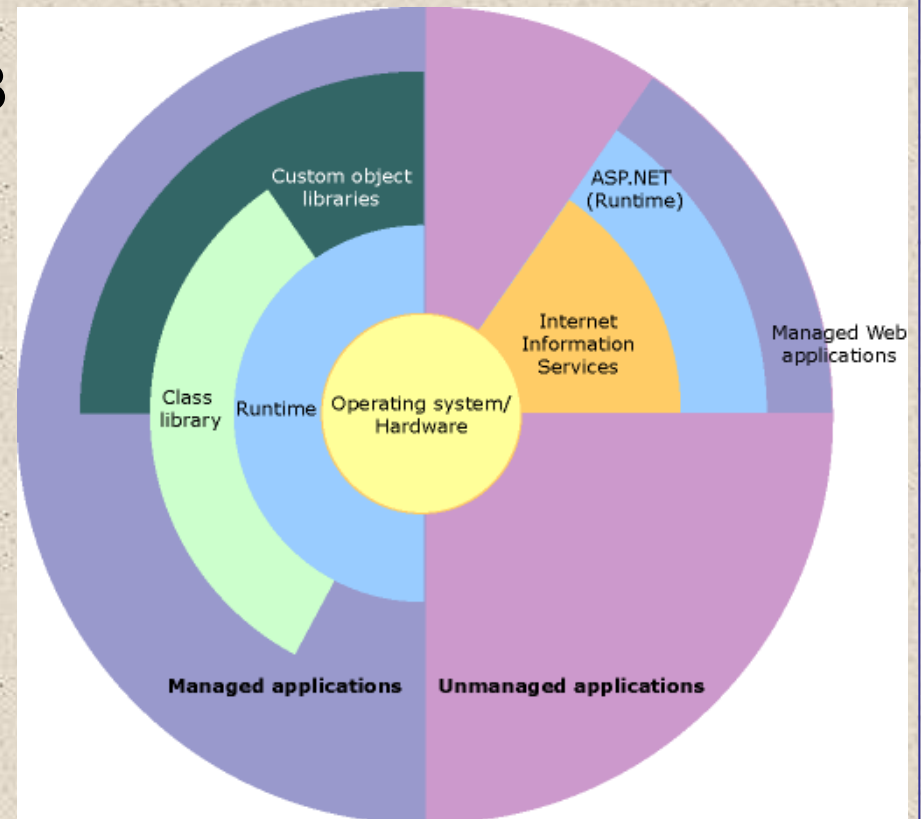
Data Access Logic

Integration Logic

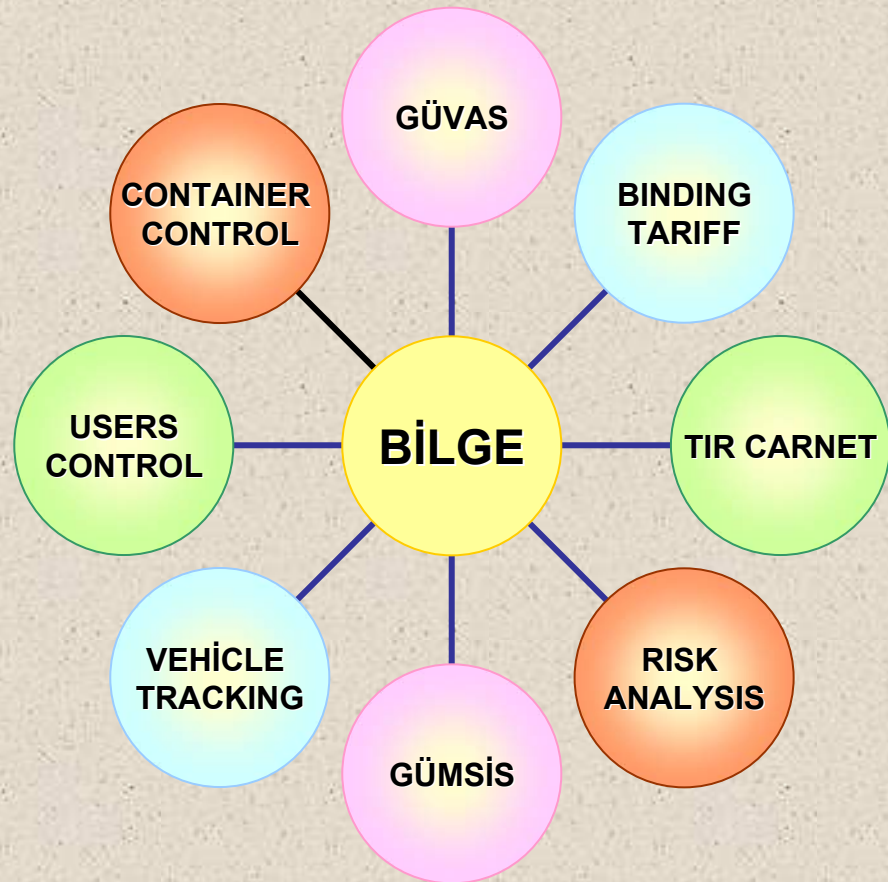
Data and Resource Management

Framework

- Microsoft Visual Studio 2008
- C# Language
- WCF 3.5 - Windows Communication Foundation
- Smart Client - Click Once Application
- Web Application
- Local Cache Mechanizm
- Commpression



OTHER SOFTWARE INTEGRATED INTO CENTRALIZED BİLGE



Deployment

- November 2009 two small range Custom Office started as pilot
- February 2010 a middle range and a small range Custom Offices is started
- March - April 2010 three small range Custom Office will be implement
- End of 2010 all Custom Offices will be implemented

Integration with IRU after Centralization

After the deployment of central applications
We have planned to

- On-line integration with IRU
- Query on validity of carnet
- On-line TIR Volet 2 data transfer after inspection

e-TIR Integration:

- Turkish Customs is ready for e-TIR system because of central TIR application is started to operate
- Ready for e-TIR messaging system because of current declaration system is using XML web services with e-signature
- Able to integrate when e-TIR system is realized

**DEVELOPMENT OF NEW
COMPUTERIZED TRANSIT
SYSTEM (NCTS) AND
INTEGRATION TO BİLGE**

Project Objectives

- **General**

- Proper protection of the future external borders of the EU through a modernized Turkish Customs Administration (TCA) to ensure that it is in a position to fulfill the tasks and obligations of an EU Member States Customs Administration.

- **Specific**

- EU compatible Customs IT systems (NCTS applications) installed and fully operational at the end of the project and in line with the EU requirements in terms of interconnectivity and interoperability.

Main Achievements

- **Project Iteration I**
 - Vision documents
 - Analysis and design documents
 - Software Prototype fully functional *07 Jul 2009*
- **Project Iteration II**
 - Analysis and design documents
 - Software Beta version installed and tested *11 Nov 2009*
- **Project Iteration III**
 - Analysis and design documents
 - Software version 1.0 installed and under tests *8 Jan 2010*
 - Integration of the software with BILGE user authorization management module is performed.
 - Integration of the software with the Ministry of Transport is performed.
 - *Integration with BILGE under tests*
 - *User Manuals for version 1.0 under development*
 - *Workshop together with twining team for NCTS users*
- **Project is in schedule (time, costs, resources, deliverables) 82%**
- **Activities for first 4 Quarters accomplished.**

THANK YOU